A storage battery of emf 8 V, internal resistance 1 ?(C), is being charged by a 120 V d.c. source, using a 15 ?(C) resistor in series in the circuit. Calculate the current in the circuit. Calculate the current in the circuit.

Step by step video & image solution for (i) A storage battery of emf 8V, internal resistance 1 Omega is being charged by a 120 V d.c. source using a 15 Omega resistor in series in the circuit. Calculate the current in the circuit (ii) terminal voltage across the battery during charging and (ii) chemical energy stored in the battery in 5 minutes

A cell of emf "E" and internal resistance "r" is connected across a variable load resistor R. Draw the plots of the terminal voltage V versus (i) R and (ii) the current I. It is found that when R = 4 ?(C), ???

ANGUILLA A STORAGE BATTERY OF EMF 8V

A capacitor of capacitance 0.1 ? 1/4 F is connected to a battery of emf 8V as shown in the fig. Under steady state condition. A. current in the resistor between point A and B is 0.2 A. B. charge on the capacitor is 0.2 ? 1/4 C. C. current in the resistor between point A and B is 0.4 A. D.

Emf of the battery e = 8 V, emf of DC supply V = 120 V Since, the battery is bring changed, so effective emf in the circuit E = V ??? e = 120 ??? 8 = 112 V Current in circuit, I = Total resistance Effective emf = r + R E = 0.5 + 15.5 112 = 16 112 = 7 A The battery of 8 V is being charged by 120 V, so the terminal potential across battery of 8 V

A storage battery of emf 8.0 V and internal resistance 0.5 ?(C) is being charged by a 120 V dc supply using a series resistor of 15.5 ?(C). What is the terminal voltage of the battery during charging? What is the purpose of having a series resistor in the charging circuit?

ANGUILLA A STORAGE BATTERY OF EMF 8V

Solution For A storage battery of emf 8.0 V and internal resistance 0.5?(C) is being charged by a 120 V dc supply using a series resistor of 15.5?(C). What is the teral voltage of the battery d. World's only instant tutoring platform. Instant Tutoring Private Courses Explore

In this scenario, the circuit consists of a 12V DC source, a 15-ohm resistor, and a storage battery with an EMF (electromotive force) of 8V and an internal resistance of 1 ohm. First, let's calculate the total resistance of the circuit. Since the resistor and internal resistance are in series, we can add them together:

A storage battery of emf 8V and internal resistance 0.5 ohm is being charged by a 120 v dc supply using a series resistor of 15.5 ohm. What is the terminal voltage of the battery during charging? View More. 00:21. Example 15: - The emf of a storage battery is 90 V before charging and 100 V after charging. When charging began the current was 10 A.

ANGUILLA A STORAGE BATTERY OF EMF 8V

A storage battery of emf 8V and internal resistance 0.5ohm is discharged through a parallel combination of to resistor each of resistance 15 ohm. W ask mattrab Old is Gold. Class Twelve Back Physics Chemistry Biology Maths Computer English Nepali Economics Account Trivia Philosopy Social

A storage battery of emf 8V, internal resistance 1 ?(C), is being charged by a 120V d.c. source, using a 15 ?(C) resistor in series in the circuit. Calculate (i) the current in the circuit. (ii) terminal ???

A storage battery of emf 8.0 V and internal resistance 0.5 ?(C) is being charged by a 120V dc supply using a series resistor of 15.5 ?(C) what in the terminal voltage of the battery during charging ? What is the purpose of having a series resistor in the charging circuit?

ANGUILLA A STORAGE BATTERY OF EMF 8V

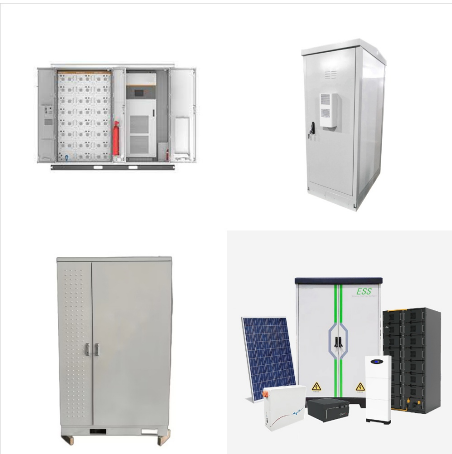
Answer: Emf of the storage battery, E=8.0 V Internal resistance of the battery, r=0.5 ?(C) DC supply voltage, V=120 V Resistance of the Online Classes. Tutions. Class 12 Tuition Class 11 Tuition Class 10 Tuition Class 9 Tuition Class 8 Tuition;

(i) A storage battery of emf 8 V, internal resistance 1 ?(C) is being charged by a 120 V d.c. source using a 15 ?(C) resistor in series in the circuit. Calculate the current in the circuit (ii) terminal voltage across the battery during charging and (ii) chemical energy stored in the battery in 5 minutes.

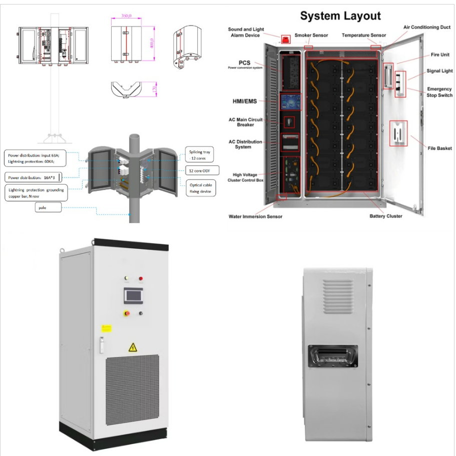
A storage battery of emf 8 v and internal resistance 0.5 ohm is being charged by a 120 v supply using a series resistor of 15.5 ohm. The terminal voltage of battery during charging is (1) 120 v ???

ANGUILLA A STORAGE BATTERY OF EMF 8V

(i) A storage battery of emf `8V`, internal resistance `1 Omega` is being charged by a `120 V` d.c. source using a `15 Omega` resistor in series in the circuit. Calculate the current in the circuit (ii) terminal voltage across the battery during charging and (ii) chemical energy stored in the battery in `5` minutes.



A storage battery of emf 8.0 V and internal resistance 0.5 A storage battery of emf 8V, internal resistance 1 Omega is being charged by a 120 V d.c. source using a 15 Omega resistor in series in the circuit. Calculate the current in the circuit (ii) terminal voltage across the battery during charging and (ii) chemical energy stored in the



A storage battery of emf 8V, internal resistance 1 ?(C), is being charged by a 120V d.c. source, using a 15 ?(C) resistor in series in the circuit. Calculate (i) the current in the circuit. (ii) terminal voltage across the battery during charging, and (iii) ???

ANGUILLA A STORAGE BATTERY OF EMF 8V

Emf of the storage battery E = 8.0 VInternal resistance of the battery r = 0.5 ?(C)DC supply voltage V = 120 VResistance of the resistor R = 15.5 ?(C)Effective voltage in the circuit = V1R is connected to the storage battery in series. Hence it can be written asVoltage across resistor R given by the product IR = 7 x 15.5 = 108.5 V DC supply voltage = Terminal voltage of battery + Voltage ???

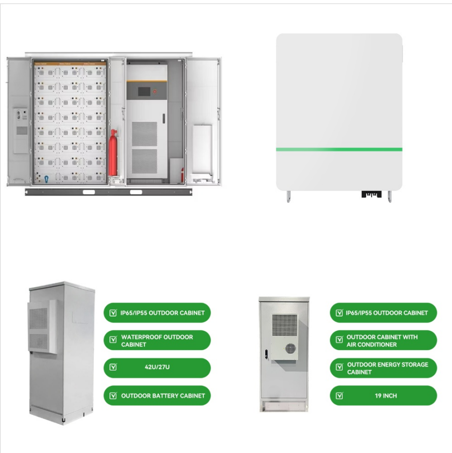
A storage battery of emf 8V and internal resistance 0.5 ohm is being charged by a 120 v dc supply using a series resistor of 15.5 ohm. What is the terminal voltage of the battery during charging? 02:34. A battery of emf 10V and internal resistance 3ohm are connected to a resistor. If the current in the ciruit is 0.5A what is the resistance of

Here emf of the battery = 0.8 V, voltage of d.c. supply = 120 V Internal resistance of battery `r = 0.5 Omega`, external resistance `R = 15.5 Omega` Since a storage battery of emf 8V is charged with a.d.c supply of 120 V effective emf in the circuit is given by `epsilon = 120 - 8 = 112V`

ANGUILLA A STORAGE BATTERY OF EMF 8V

A storage battery of emf 8V, internal resistance 1 ?(C), is being charged by a 120V d.c. source, using a 15 ?(C) resistor in series in the circuit. Calculate (i) the current in the circuit. (ii) terminal voltage across the battery ???

Emf of the storage battery, E = 8.0 V. Internal resistance of the battery, r = 0.5 ?(C). DC supply voltage, V = 120 V. Resistance of the resistor, R = 15.5 ?(C). Effective voltage in the circuit = V 1. R is connected to the storage battery in series. Hence, it can be written as. V ???



A storage battery is of emf 8V and internal resistance 0.5 ohm is being charged by d.c supply of 120 V using a resistor of 15.5 ohm a) Draw the circuit diagram. b) Calculate the potential difference across the battery. c) What is the purpose of ???

ANGUILLA A STORAGE BATTERY OF EMF 8V

A storage battery is of emf 8V and internal resistance 0.5 ohm is being charged by d.c supply of 120 V using a resistor of 15.5 ohm a) Draw the circuit diagram. b) Calculate the potential difference across the battery. c) ???

Consider the circuit shown below. Battery emf is -8V and the Battery emf is -8V and the resistances are R1 = 52?(C), R2 = 39?(C), and R3 = 170?(C). The current through R1 does not change whe Consider the circuit shown below. Battery emf is -8V and the Feed back Chat Online >>

A Storage battery of emf 8.0V and internal resistance 0.592 is being charged by a 120V de supply using a series resitor of 15.512. What is the terminal voltage of the battery during charging ? 1) 11.5V 2) 15.5V 3) 17.5V 4) 14.5V

ANGUILLA A STORAGE BATTERY OF EMF 8V

A storage battery of emf 8V, internal resistance 1 ?(C), is being charged by a 120V d.c. source, using a 15 ?(C) resistor in series in the circuit. Calculate (i) the current in the circuit. (ii) terminal voltage across the battery ???

A storage battery is of emf 8V and internal resistance 0.5 ohm is being charged by d.c supply of 120 V using a resistor of 15.5 ohm a) Draw the circuit diagram. b) Calculate the potential difference across the battery. c) What is the purpose of having series resistance in this circuit?